

C! 20. (amended) The [method] product of claims 17-18, further comprising (3) subjecting the nonwoven web to corona treatment before step (1).

Remarks

Claims 17-20 have been amended. Claims 14-20 remain pending in the application.

Claims 14-20 have been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Applicants believe that the amendment to the claims overcomes this rejection. In regard to the rejection of claims 14-16 as being indefinite pertinent to the charge resistivity level of the nonconductive microfibers, the Examiner's attention is directed to page 4, lines 3-5 of the specification. There the term "nonconductive" is clearly defined.

Claims 14-20 have been rejected under 35 U.S.C. § 103 as being unpatentable over U.S. Patent 4,874,399 to Reed et al. (Reed) in view of U.K. Patent Application 2176404A ('404A) and U.S. Patent 4,548,628 to Miyake et al. (Miyake). Applicants respectfully submit that this rejection cannot be sustained.

The primary reference to Reed discloses an electret filter media containing polypropylene and poly(4-methyl-1-pentene). The reference teaches that improved filtration performance can be demonstrated when the fibers contain a blend of both polypropylene and poly(4-methyl-1-pentene). The '404A patent application discloses a respirator that comprises a mask with two layers of different filtering materials. Miyake discloses a filter medium and a process for making the filter medium. The filter medium is prepared by jetting high-pressure water to at least one surface of the fibrous microwebs, after or without heat treatment, from nozzles having a diameter of 0.05 to 0.5 mm. A web or webs are composed of mainly ultra-fine combustible synthetic fibers having a single fiber diameter of 0.1 to 1.5 μ .

Applicants' invention pertains to a new electret filter media. As shown in applicants' examples, the electret filter media of the present invention has improved penetration and quality factor values over known electret webs. In particular, applicants have demonstrated that their web has enhanced filtration characteristics over webs that contain blends of polypropylene and poly(4-methyl-1-pentene). Applicants have also demonstrated that webs of their invention have improved performance over webs that contain mixtures of polypropylene and poly(4-methyl-1-

pentene) when charged over known techniques. The Examiner's attention is directed, in particular, to the data set forth in Tables 6-9. In view of the beneficial properties that applicants' webs demonstrate, their invention would not have been obvious to a person of ordinary skill under the terms of 35 U.S.C. § 103.

Accordingly, please favorably reconsider the rejections and allow this application at an early date.

Dated this 24th day of January, 1997.

Respectfully submitted,

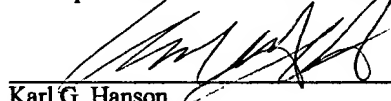


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Dated: January 24, 1997